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LONG-TERM OUTCOME AFTER DEFERRAL OF REVASCULARIZATION IN PATIENTS WITH INTERMEDIATE CORONARY STENOSIS AND GRAY-ZONE FRACTIONAL FLOW RESERVE

Oral Contributions
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Background: The safety of deferring revascularization of intermediate coronary stenosis with fractional flow reserve (FFR) of 0.75 - 0.80, the so-called "gray zone", remains debatable. The aim of this study was to assess the safety of deferring revascularization for patients with FFR of 0.75 – 0.80 compared with those with FFR of >0.80.

Methods: We assessed long-term outcomes of 150 patients with angiographycally intermediate stenosis deferred from revascularization on the basis of FFR ≥0.75. Target vessel failures (TVF) defined as a composite of cardiac death, target vessel related myocardial infarction, and ischemia-driven target vessel revascularization were evaluated during follow-up period.

Results: A total of 56 patients had coronary lesions with FFR of 0.75 - 0.80 and 94 patients had those with FFR of >0.80. There was no difference in baseline clinical characteristics between the two groups. Patients with FFR of 0.75 - 0.80 had more left anterior descending lesions than those with FFR >0.80 (75% vs. 44%, p = 0.001). During a median follow-up period of 3.0 (2.1 - 4.0) years, the incidence of TVF was higher in patients with FFR of 0.75 - 0.80 than those with FFR of >0.80 (16% vs. 3%; hazard ratio, 5.2; 95% confidence interval, 1.4 to 19.5; p = 0.015). All TVF consisted of target vessel revascularization, except for one case of cardiac death in patients with FFR of 0.75 - 0.80.

Conclusions: Patients with FFR of 0.75 - 0.80 were at higher risk of TVF mainly due to target vessel revascularization than those with FFR of >0.80.